

Title (en)

MIXED MICELLES INCLUDING AMPHIPATHIC CONJUGATES OF RNA AGENTS, AND USES THEREOF

Title (de)

GEMISCHTE MIZELLEN MIT AMPHIPATHISCHEN KONJUGATEN AUS RNA-WIRKSTOFFEN UND VERWENDUNGEN DAVON

Title (fr)

MICELLES MIXTES RENFERMANT DES CONJUGUÉS AMPHIPHATIQUES D'AGENTS ARN ET LEURS UTILISATIONS

Publication

EP 2171095 A4 20120711 (EN)

Application

EP 08826166 A 20080707

Priority

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Abstract (en)

[origin: WO2009009025A1] Disclosed are improved pharmaceutical formulations for the delivery of RNA interference agents, such as antisense RNA, micro-RNA and siRNA. The formulations employ mixed micelles including amphipathic conjugates of the iRNA agents and amphipathic micelle-forming molecules with extended hydrophilic chains. Also disclosed are methods of using the pharmaceutical formulations to increase delivery of an iRNA agent to an intracellular target, and to decrease extracellular nuclease degradation of an iRNA agent in the formulations.

IPC 8 full level

A61K 9/107 (2006.01); **A61K 47/48** (2006.01); **C12N 15/11** (2006.01); **A61P 43/00** (2006.01)

CPC (source: EP US)

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Citation (search report)

- [X] WO 2005041859 A2 20050512 - SIRNA THERAPEUTICS INC [US], et al
- [X] WO 2004094595 A2 20041104 - ALNYLAM PHARMACEUTICALS INC [US], et al
- [Y] US 2006275903 A1 20061207 - MCSWIGGEN JAMES [US], et al
- [Y] WO 9634876 A1 19961107 - NEXSTAR PHARMACEUTICALS INC [US], et al
- [I] BEHLKE ET AL: "Progress towards in Vivo Use of siRNAs", MOLECULAR THERAPY, vol. 13, no. 4, 1 April 2006 (2006-04-01), pages 644 - 670, XP005358601, ISSN: 1525-0016, DOI: 10.1016/J.YMTHE.2006.01.001
- [Y] ESAU ET AL: "Therapeutic potential for microRNAs", ADVANCED DRUG DELIVERY REVIEWS, vol. 59, no. 2-3, 30 March 2007 (2007-03-30), pages 101 - 114, XP022087317, ISSN: 0169-409X, DOI: 10.1016/J.ADDR.2007.03.007
- [Y] HASHIDA ET AL: "Characterization of a Lipophilic Prodrug of 5-Fluorouracil with a Cholesterol Promoiety and Its Application to Liposomes", CHEMICAL & PHARMACEUTICAL BULLETIN, vol. 36, no. 8, 1 January 1988 (1988-01-01), pages 3186 - 3189, XP002063290, ISSN: 0009-2363
- See references of WO 2009009025A1

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DOCDB simple family (application)

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